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I, LEANNE MYNOTT, TEAM LEADER EXAMINATION SUPPORT AND SALES hereby certify that annexed is a true copy of the Provisional specification in connection with Application No. PQ6149 for a patent by SZEWACH, ELIK AND HORTEN, LISA filed on 09 March 2000.



WITNESS my hand this Seventh day of April 2000

I. Mith

LEANNE MYNOTT
TEAM LEADER EXAMINATION
SUPPORT AND SALES

PRIORITY DOCUMENT

SUBMITTED OR TRANSMITTED IN COMPLIANCE WITH RULE 17.1(a) OR (b)

AUSTRALIA

Patents Act 1990

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PROVISIONAL PATENT SPECIFICATION

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INVENTION TITLE:

Means for Regulating Gaming

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The invention is described in the following statement:-

TITLE:

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MEANS FOR REGULATING GAMING

TECHNICAL FIELD

This invention relates to methods, apparatus and systems for use in the regulation or control of gambling and other forms of gaming wherein monetary and/or credit and/or debit transactions take place before the game commences, during the course of the game and/or at the completion of the game.

The gaming with which this invention is primarily concerned is that which is mediated by computers or machines, including gambling via the Internet, poker, lotto, racing venue betting machines player and Internet operated wagering machines or the like. However the invention can also be applied to over-the-counter and/or stand-alone betting or gaming.

Since aspects of the invention relating to the regulatory systems and protection of financial transactions conducted over a telecommunications and/or computer network are applicable elsewhere other than in gaming, this invention also relates to methods for effecting computer and network systems security and to such computer systems.

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BACKGROUND TO THE INVENTION

There is increasing concern by governments, religious organisations and citizens groups about the social and personal cost of gambling, particularly in relation to the diversion of investment and normal consumer spending, the rapid growth in the number of compulsive gamblers and the encouragement of excessive gambling by gaming establishments. There is also particular concern regarding the use of credit cards for gambling and the ready access of under-age persons and compulsive gamblers to Internet gaming.

Many gamblers wish to remain anonymous with respect to both gaming houses and to fellow players when participating in games of chance. Such gamers are

therefore uneasy about allowing gaming establishments to serve as bankers or moneychangers. If players can be identified by a gaming house, they are likely to be aggressively targeted with promotional materials. This targeting will be intense should the gaming house learn that a gamer is wealthy or has access to significant sums of money.

On the other hand, there is a need for gaming houses and fellow gamers to be assured of the credit worthiness of customers and fellow players and, preferably, to know that other gamers have the funds on hand to cover their bets. There is also a wish by gamers themselves to set limits on their actual or potential losses before commencing a gaming session.

US patent no. 5,800,268 to Molnick discloses a method of validating the financial transactions of players who participate in a live casino game from remote locations via a communications network. Each remote player receives live television and data signals relating to a casino game at his/her remote station and uses it to convey bet intention information to the casino. Before the player is permitted to join a game or place a bet, the casino establishes a direct and open link to the player's bank or other financial institution that allows the casino to instantaneously check that the player has enough credit to cover his/her bet, pay winnings directly into the player's account, and recover losses directly from the player's account.

It will be appreciated that such a system would be of great concern to governments and community groups concerned about the excesses of gambling, particularly where credit cards are used. It would also allow gamers to be targeted, cheated or otherwise exploited by gaming houses and their staff. The dangers are particularly serious where the game is being conducted on the Internet and the gaming house is in another country (if its location is disclosed at all)

OBJECTIVE OF THE INVENTION

This object of this invention is to provide a method, apparatus and/or system for use in the regulation or control of gambling and other forms of gaming where monetary transactions take place.

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OUTLINE OF THE INVENTION

From one aspect, the present invention involves the use of an electronic purse (for example, a smart-card) that can be loaded with electronic cash from the owner's normal bank account or credit card, identified with the owner by biometric means and accepted for gaming purposes by card readers in casinos, gaming houses, taverns and the like, or in the owner's own home or place of work. Means are incorporated within the purse for regulating or limiting the use of the card according to the gaming establishments where it can be used, the amount of cash available from the card during a given period or at a given time for gaming purposes.

A system based upon such an electronic purse can:

- (i) Allow gamblers to remain anonymous with respect to gaming establishments,
- (ii) Allow gamblers to limit the maximum bet that can be placed using the purse and/or the amount that can be wagered during a give period of time,
 - (iii) Allow courts or government welfare agencies to limit the maximum bet that can be placed using the purse and/or the amount that can be wagered during a give period of time,
- 25 (iv) Allow regulatory agencies to bar the issue of such smart-card purses to persons convicted of gambling related crimes, to underage persons or to others.

- (v) Allow regulatory agencies to limit the amount of cash that can be loaded into a smart-card purse owned by, for example, chronic gamblers or persons convicted of gambling related crimes, and/or
- (vi) Make it possible for governments to legislate the use of readers for smart card purses by designated gaming establishments, while at the same time outlawing credit card gambling (or at least making gambling debts charged direct to credit cards unrecoverable).

Protection of Players Personal Data & Means of Transaction

In one preferred/possible mode of play refer, patent application no. PP 9477, application date: 29th March 1999, a player can electronically place money in a secure electronic purse before, during and after each game so that the electronic purse is accessible via the casino for:-

- (i) paying losses by the players and wins to the player; and/or
- (ii) checking the players ability to cover any bet placed during a game. The
 use of such a purse avoids any access by the casino to the player's bank
 and private banking details, in accordance with a player's preferred
 privacy options. The system allows a player to remain anonymous, once
 the validity of the purse has been confirmed by the casino or gaming
 venue. For further details on the method of transaction refer to the above
 patent number.

The method of transacting outlined above involves the loading of cash onto a player's personal smart card it is proposed that additional features be incorporated to adopt this patent's regulatory features.

Regulating the Amount to be Wagered per Month

The regulating of the maximum amount to be wagered each month can be held as an application which is installed onto a smart card that limits the total amount that can be deposited into the players regulated ABC (All Bets Card) smart card in any

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given month or any other time period. This amount may be determined by means agreed to the player, the national or regional regulatory authority or such other authority or as the player and the gaming establishment mutually agree. The limit of deposit able to be loaded into the regulated A.B.C smart card is the maximum a player can lose within a month. Winnings can be either left on the A.B.C smart card to play at any time of the players choosing or transferred from the card to the players bank account or further played with or collected by the player at the casino, gaming establishment or by any other arrangement that is mutually agreeable to both the player and the casino. Winnings do not affect the regulated maximum amount that may be deposited onto the regulated A.B.C smart card for gambling in any given month. This function of the smart card is achieved via programming the ABC smart card purse (details pertaining to the purse can be found in patent pending application N0: PP9477 application Date 29th March 1999, applicants Lisa Horten and Elik Szewach. Details pertaining to regulatory methods and means limiting the monthly amount deposited into a players regulated A.B.C smart card are disclosed in this patent.

Control Of Credit Card Gambling

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A method of using credit cards in relation to electronic purses is contained in patent pending no: PP 9477, application date 29th March 1999, applicants Lisa Horten and Elik Szewach, inventors, Elik Szewach, Lisa Horten and Ian Donald.

Barring Problem Gamblers

A further feature that may be installed in the proposed regulation system for national and international gaming establishments, that are licensed to provide regulated gambling, is the ability to bar problem gamblers from using their licenced A.B.C smart card from accessing any casino or other gaming establishment (s) that provide licenced regulated gambling. The problem gambler can be denied the ability to bet or play games should the player and licensed gaming establishments be directed or ordered by a regulatory authority or a court or social welfare agency or by a spouse or other person under a court order. This may be for a period of days, weeks, months or years or in certain cases for life. This regulatory feature will recognise the barred players via the licensed ABC

smart card automatically at all regulated gaming establishments. The gaming system is capable of recognising that this card is banned and deny access to the owner of the card for the duration of the order. Further more the barred player will not be able to apply for a second card during their period of disqualification, which is explained in more detail in this patent.

Under Age Gamblers

Given appropriate legislation, players will need to apply for a regulated A.B.C smart card checks prescribed by the government regulator will be carried out by an authorized agent (s) to ensure that sufficient identification is produced to identify the player and age and set the players limit. In a number of countries a Proof of Age card is already issued based on appropriate identity checks. This card can be upgraded to a smart card where the issuing authority determines that this is appropriate. A PIN number or biometric identification will be provided to allow the player to use the regulated A.B.C smart card in all licensed regulated casinos and Internet casinos and all-other regulated gambling establishments. Under age players will not be issued with an A.B.C smart card which is explained in further detail in this patent.

20 Deny Entry To Unregulated Casinos

The regulated A.B.C smart card can have a control application which may deny the player access to gamble at unregulated casinos and Internet casinos using the funds they have on their card. The method of enforcing this feature is explained in this patent.

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Gambling Via Interactive TV or Broadband Networks

This form of home based gaming where the player can place bets via the Internet and/or broadband cable and watch the live event or game show on TV can be regulated also using the licensed A.B.C Smart card. An approved A.B.C Smart card reader is provided in the home, moneys are transferred onto the smart card utilising different methods including e-purse, debit and/or credit transactions. The transfer of money to the gaming establishment is via the Internet or

telecommunication networks or computer networks. Security, method of transfer and positive identification is explained in the teachings of Patent Application No PP9477 Application date: 29th March 1999 applicant Lisa Horten and Elik Szewach.

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DESCRIPTION OF EXAMPLES

Having generally described the nature of the present invention, particular examples are now described by way of example and illustration only. In the following description reference is to the accompanying drawings, wherein:-

Figure 1 is a diagram illustrating a smart card purse.

Figure 1A is a diagram indicating the features of a reader for the card of Figure 1.

Figure 2 is a chart indicating interactions between the ABC smart card and gaming establishments that are part of a regulated gaming industry during a typical gaming session employed in the system of the chosen example.

Figure 2 A is a chart indicating the relationship between the electronic purse, banks and regulatory authorities for the example.

Figure 2B is a further chart indicating the relationship between the electronic purse, banks and regulatory authorities for the example.

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With reference to figure 2, the general system 10 of the example comprises a gaming establishment 12 that is licensed as part of the proposed regulated gaming industry and three different player station examples 14a poker machine, 14b Internet in conjunction with interactive TV or pay TV etc and 14c Internet via a PC. In this example, gaming establishment 12 houses a secure area (16) fitted with a regulated CPU (17) a PC terminal that will access the files no22 to store instructions pertaining to the player that may be so ordered by a court of law 20. The gaming establishment 12 also includes a regulated file server 22 and an

Internet/telecommunication network such as IDSN or computer network bridge (24), server 22 being connected to PC terminals 20 and capable of feeding both data and control signals to bridge 24.

- Bridge 24 includes an Internet/telecommunications, computer network, ISDN and 5 related connections. It outputs electronic data and video signals in any of the above formats to telecommunications carrier having ground transmit/receives dishes 26 and a satellite repeater 28. It should be recognised that the telecommunications link may just be a terrestrial landline or cable, or a combination of terrestrial and satellite links or landlines or telecommunication 10 networks or computer networks. The nature of this link is immaterial to the present invention. For convenience of illustration, player station examples 14a, 14b and 14c are shown as each being connected either through an Internet/telecommunication ISDN or other type of computer network modem 32 from common dish 28 but it will be appreciated that these stations may be 15 physically situated within a regulated gaming establishment or within a city, state or country or in different countries and connected to different telecommunication links or other different dishes.
- Each player station 14b and 14c of this example comprises of an interface unit 40 which includes a modem that corresponds to the telecommunication medium employed and which is connected to PC 42 or in the case of player station 14a interface unit 40 which includes modem connection with a poker machine that is fitted with an ABC smart card reader PC 42 is connected to a smart card reader/writer unit 45.

Smart card unit 45 is equipped with a biometric enabled smart card reader/writer or PIN identification system (not separately illustrated) which, includes a fingerprint recognition device. For example Siemens markets a smart card capable of recognizing the thumbprint or fingerprint on the card which can be verified against the digitally stored record held on the smart card by the smart

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card reader. Alternatively a smart card has the ability to read the fingerprint that is stored in the card chip with a finger scanning such as marketed by Fingerscan. Loading of moneys onto the ABC smart card (method of transaction) is disclosed in the teachings of patent application number PP 9477; application date 24th March 1999.

The ABC smart card is used to establish a player's purse for each game is supplied by the regulated gaming establishment and is encrypted with identification code recognisable by the player's card reader and by the regulated establishments. The smart card is issued by one regulated gaming organisation or it's agent and it can be used by all other similarly regulated organisations. The smart card reader is supplied by the regulated gaming establishment and is encrypted with an identification code which is recognised by the A.B.C. smart card as well as all similarly licensed gaming establishments.

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When the player wishes to commence a game, the player authenticates himself or herself with the stored details in the card by either a PIN or by biometric means. Identification via the reader or via a card that has the ability to self-check the fingerprint touching the card with the stored digital image of the fingerprint. Further details pertaining to the identification and security checks are taught in patent pending no PP 9477.

Once it has been confirmed by the smart card reader that the player is the owner of the card, the player logs onto the gaming system. The Internet or other gaming establishment checks the files to ensure that the ABC smart card is authentic by way of encryption interrogation software again described in patent pending no PP 9477. Further checks such as the card validity or whether it has been subject to a stop order will also be carried out. The cards have in-built regulatory features which prevent the player transferring the cards stored value across to the gaming establishment should the cards in-built gaming limit have been utilised already in that month. As mentioned in other areas in this patent any winnings stored on the

card are not included in the limit held on the cards. If the processes described above are completed correctly the player may transfer the money available on the card to the gaming establishment. The method of transfer of financial transactions are taught in patent pending No PP 9477. If the gaming establishment is not part of the regulated industry the card cannot be used for any form of the transactions described in this patent.

The above example also applies to a poker machine situated in a licensed regulated premise. The above would apply in much the same way if the player is physically playing the machine. The additional security methods and methods of transferring winnings are taught in patent pending No PP9477.

Regulated Gaming

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Referring to Figure 3, the ABC smart card is inserted into the ABC smart card reader where the identification of the card and player is completed. Loading the card via the reader may be carried out over the Internet or telecommunication lines or computer networks to banks, or other financial services that provide this transfer of monies from the players account, EFTPOS or over the counter at a regulated gaming establishment. Further explanation is given in the teachings of patent pending application PP 9477; application date 29th March 1999, applicants Elik Szewach and Lisa Horten.

Regulated Reader Features

Figure D, E, F, G, H, I, J 1) shows a example of a regulated A.B.C. (all bets card) smart card system. The letter represents the applications contained in the smart card and in the smart card reader that can be programmed to regulate the gaming system. They do not indicate or relate the actual file positions of the applications stored in the chip.

Clock Application

The smart card holds month, days, hours and minutes data and thus controls the maximum amount which can be loaded on the e-purse during the defined period such as a calendar month. The clock application which is incorporated in all ISO 7816-1-6 smart cards is accessed by the purse application. When the clock begins a new month a signal is sent to the purse opening the limit, at the end of a month closing the purse reopening the purse limit again at the beginning of the new month. Any unused monies or unused amounts below the monthly limit may be transferred to the next month.

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Purse Application

Regulates the total amount (present limit) the player may deposit for gaming via the A.B.C. card in any calendar month or other period. When this preset limit has been reached the purse is closed to any further deposits for gaming for that month. The clock will reopen the purse to further gaming deposits when a new month starts or transfer any unused cash or unspent limit into the next month.

Deny Access To Unregulated Gaming Industries And Under Age Gamblers

This is achieved by using special encryption techniques and security methods that are taught in the patent application No PP9477 Application Date 29th March 1999 Invention title Remote Live Gaming System applicant Lisa Horten and Elik Szewach inventors Horten Szewach, Elik Szewach and Ian Donald. The application also uses the thumbprint reader stored on the smart card such as manufactured by Siemens and also the fingerprint scanner such as marketed by Fingerscan.

Deny Access To Players Who Have Become Barred From Gaming Under Court Or Other Authorised Direction.

All gaming establishments that are part of the regulated industry will be notified electronically by the regulatory authority which provides an upgraded authorisation of all cardholders who are barred and the period for which they are

barred. This database is transferred in the CPU and computer files to not accept this player's card for the nominated (preset) time. Should this card be presented to a regulated gaming establishment it would not be accepted by the establishment CPU database until the expiry date when that card would be accepted again.

The card applications and e-purse can be locked by the cardholder using a personal identification number (PIN) of at least 4 digits. The player has the facility to change the PIN number from the initial PIN issued separately by the regulated gaming organisation. The use of PIN prevents unauthorised use of the card by others. The card issued to the player may contain a 6 digit code which identifies, for example:

- i) in which country the card was issued; and
- ii) in which regional area the card was issued e.g. State, Territory, District, country or other second or third tier government area.
- The purpose of this code is to enable the regulated gaming establishment to identify international transactions (which may be subject to different tax regimes and/or exchange rates). Countries wishing to ban, for example, Internet gaming, can regulate Internet service providers by banning the use of the A.B.C. smart card system.

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Elik Szewach and Lisa Horten
By their Attorney
Paul A Grant
9 March 2000

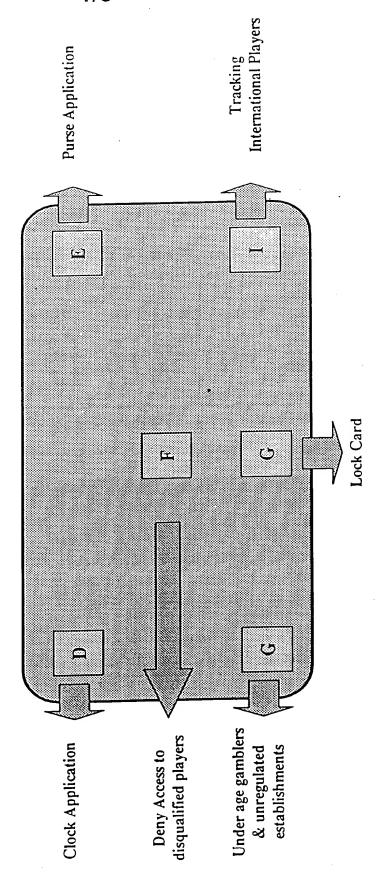
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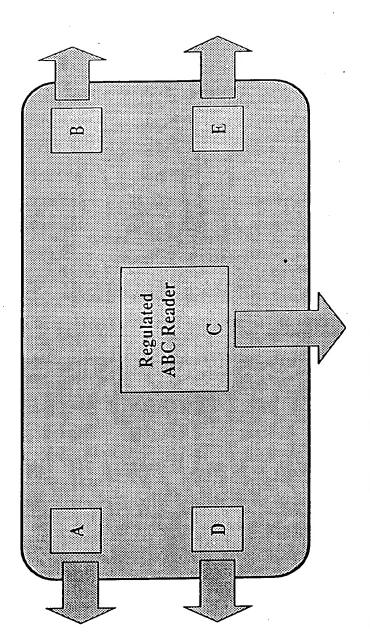
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REGULATED FEATURES OF THE ABC CARD

FIGURE 1



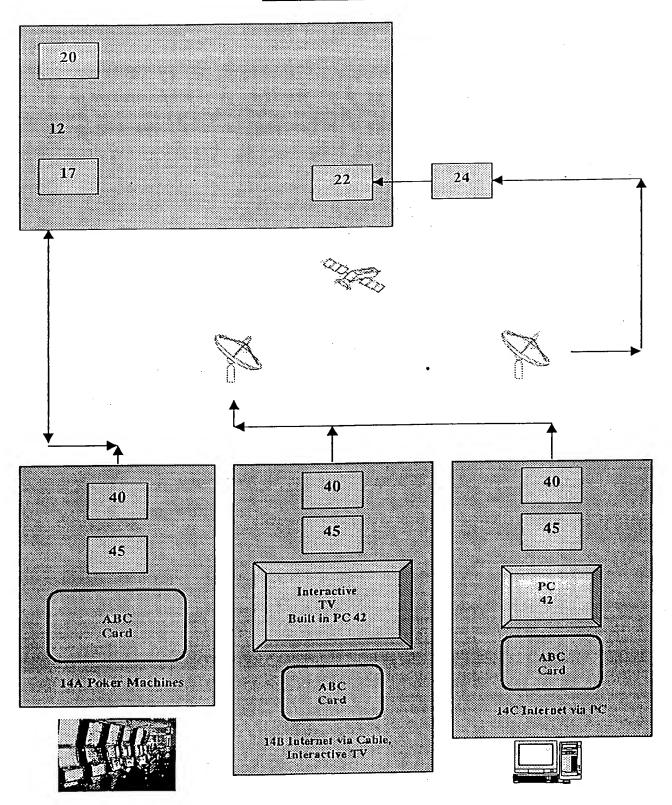
REGULATED READER FEATURES



A= Finger print or other type of biometric identification B= Bios recognition of Card and Reader

Fig. 1A

FIGURE 2

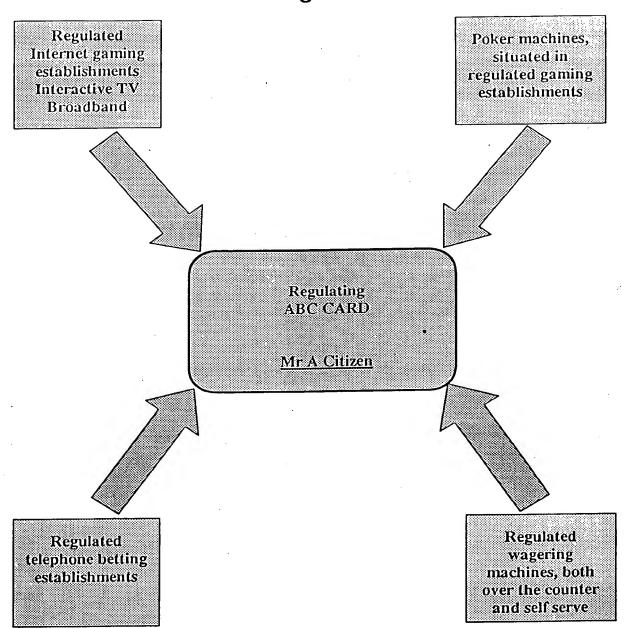


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REGULATED GAMING

Fig. 2A

Fig. 2B



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